DEPARTMENT OF THE NAVY
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NRSINST 3140.1
00X
01 JUN 2004

NRS INSTRUCTION 3140.1

Subj: DESTRUCTIVE WEATHER PLAN

Ref: (a) OPNAVINST 3140.24E
(b) COMLANTFLT 281506Z MAR03
(c) COMLANTFLT 021545Z MAY02
(d) COMFLTFORCOM NORFOLK VA 191149Z APR04
(e) CINCLANTFLTINST 5400.2M CH3
(f) COMNAVAIRLANTINST 3141.1L

Encl: (1) Weather Warning Definitions
(2) Saffir/Simpson Hurricane Category Definitions
(3) Navy Region South Map and Areas of Responsibilities
(4) Sample Activity Hurricane Preparation Guide

1. Purpose. To publish guidance for destructive weather Conditions of Readiness (CORs) in the Commander, Navy Region South (CNRS) Area of Responsibility (AOR).

2. Discussion

a. References (a), (b), and (c) provide destructive weather guidance and establish CORs for tropical cyclones (e.g., tropical storms and hurricanes) in anticipation of destructive winds. Although the main body of this instruction focuses on CORs, enclosure (1) provides details on a variety of different hazardous weather warnings. Enclosure (2) provides amplifying information for hurricane strength categories based on the Saffir/Simpson Scale.

b. Hazardous weather elements include high wind gusts, high sustained winds, thunderstorms, tornadoes, hail, and/or lightning. The Navy's Regional Weather Facility, NAVLANTMETOCFAC Jacksonville, local base NAVLANTMETOC Detachments, and the National Weather Service (NWS) issue hazardous weather warnings. For tropical hazardous weather, NAVLANTMETOC DET Corpus Christi will issue appropriate warnings including tropical wind advisories/warnings and recommend setting appropriate tropical cyclone CORs.

c. Sustained tropical winds of 34-49 knots are hazardous winds. NAVLANTMETOC DET Corpus Christi will issue ***Tropical Wind Warnings*** for anticipated winds of 34-49 knots.

d. Sustained tropical winds of 50 knots and greater are destructive winds. CNRS will order ***Tropical Cyclone CORs*** when tropical cyclone winds of 50 knots or greater are anticipated. CNRS will then collate reports of attainment from the region's "reporting commands" and forward to COMLANTFLT. CORs are based upon timelines for the onset of destructive winds. However, preparations should be made for all anticipated weather to include wind, seas, storm surge (increases in sea level due to tropical cyclone winds piling up water in coastal regions), flooding, and tornadoes.

e. Basic Tropical Cyclone COR Definitions and Actions:

(1) COR 5 – Destructive winds possible within 96 hours. **Due to the geographic location of the CNRS AOR, all commands are directed to maintain COR 5 as a minimum state of readiness from 01 JUN – 30 NOV.** CNRS will order COR 5 on 1 June of each year via DMS message.

(2) COR 4 - Destructive winds possible within 72 hours.

(a) The CNRS Hurricane Duty Officer is located at CNATRA Corpus Christi Texas, and will establish a 24/7 watch upon setting of COR 4. When directed (normally at the setting of COR3), the HDO will evacuate to JRB Fort Worth, and establish the Emergency Operations Center (EOC) at JRB FT Worth.

(b) Commands within COR 4 commence tracking storm and warn all tenants under your cognizance.

(c) Review destructive weather plans and commence planning for actions required in higher CORs to safeguard personnel and material (e.g., Hurricane Planning Conference for Aircraft Evacuation).

(d) Continue general operations.

(e) All commands take full precautionary measures to establish the next higher condition on short notice.

(3) COR 3 - Destructive winds possible within 48 hours.

(a) Take preliminary precautions in accordance with regional and local destructive weather plans.

(b) All commands take full precautionary measures to establish the next higher condition on short notice.

(4) COR 2 - Destructive winds anticipated within 24 hours.

(a) All commands and activities execute local destructive weather directives.

(b) All commands take full precautionary measures to establish the next higher condition on short notice.

(5) COR 1 - Destructive winds are occurring or anticipated within 12 hours. **Take all possible precautions to safeguard personnel and material.**

f. Reference (d) assigns CNRS as the regional coordinator with responsibility for ordering destructive weather warnings and Tropical Cyclone CORs within Navy Region South. Enclosure (3) is a map and description of Navy Region South.

g. Tropical Cyclone CORs are disseminated via: e-mail at NRS-EOC.navy.mil; Phone: (DSN) 861-2200/2221, (COM) 361-961-2200/2221. Additional information is available from the CNRS Hurricane Duty Officer (HDO). Those commands desiring record copy (DMS) of Tropical Cyclone COR messages should contact NAVLANTMETOCFAC DET Corpus Command Duty Officer (CDO) or HDO.

h. CORs for destructive weather of other than tropical cyclone origin (e.g., winter storms) are set by local commands and activities (normally by the host command for each installation).

i. Nothing in this instruction shall alleviate the inherent responsibility of local commanders to set higher CORs as they deem appropriate to ensure the safety of their personnel and facilities.

3. Coordination. The following commands are designated as reporting commands. When CORs are ordered in an area, the reporting command will report attainment of the ordered COR to CNRS Hurricane Duty Officer by voice, or e-mail.

AREA	REPORTING COMMANDS
ALPHA ONE	CNATRA
ALPHA TWO	Naval Air Station Corpus Christi Commander, Training Air Wing FOUR
ALPHA THREE	Naval Air Station Kingsville Commander, Training Air Wing TWO
ALPHA FOUR	Naval Station Ingleside
BRAVO ONE	Naval Air Station JRB New Orleans
BRAVO TWO	NSA New Orleans
CHARLIE ONE	NAS JRB FT Fort Worth

4. Action

a. Ordering CORs:

(1) Commander, Navy Region South will direct the ordering of appropriate CORs for the CNRS AOR. Tropical Cyclone CORs are based on information contained in warnings from Naval Atlantic Meteorology and Oceanographic Center (NAVLANTMETOCCEN) Norfolk, VA, and the National Hurricane Center. Messages that order CORs contain forecasts of the maximum sustained winds expected. CORs will be ordered for each area designated in enclosure (3) as the storm track warrants. Local commanders may order a higher COR at their discretion and will report the attainment and termination of each COR placed in effect on their own accord to the CNRS Hurricane Duty Officer.

(2) Per reference (b), all Atlantic Fleet activities will use a Tropical Cyclone COR with a 50 knot threshold vice the two tiered Tropical Storm (34-64kts) and Hurricane (65+ kts) system used by the National Weather Service. CORs will be ordered based upon the size and forecast track of the cyclone, not just on the maximum sustained winds at the center of the system. Be alert for rapid changes in wind speeds when forecasts are amended.

(3) Communication centers in receipt of a Tropical Cyclone COR message are responsible for its dissemination to local units.

(4) Host commands in receipt of a COR message are responsible for ensuring that tenants are appropriately notified.

b. COR Attainment Reporting:

(1) Host commands establish local reporting procedures for tenant commands. Tenants and local units report COR attainment to the host command.

(2) Host activities, which are designated "Reporting Commands" in paragraph 3, shall make a consolidated report to the CNRS Hurricane Duty Officer.

(3) Other designated "Reporting Commands" report attainment to CNRS Hurricane Duty Officer.

(4) Make attainment reports via voice, followed up with e-mail to the CNRS Hurricane Duty Officer or NRS EOC when established:

Commands are to make reports to the NRS/CNATRA EOC at:

E-mail: NRS-EOC@navy.mil; info: _____; and _____

COMM: (361) 961-2200/2221
DSN: 861-2200/2221

When EOC transfers to NAS JRB FT Worth, contact information as follows:

E-mail: NRS-EOC@navy.mil
COMM: (817) 782-6424
DSN: 739-6424

Note: DMS messages will not be used to report COR attainment.

c. Securing from Tropical Cyclone CORs: NAVLANTMETOCFAC DET Corpus Christi, as the ADDU Staff Meteorologist to CNRS, will recommend securing of appropriate CORs for the CNRS AOR.

d. All Navy or Marine Corps commands/activities in the CNRS AOR shall comply with the following:

(1) Annually, two weeks prior to the start of the Navy's Hurricane Exercise (HURREX), all "Reporting Commands" (paragraph 3) provide the CNRS Staff DPO Officer with name, phone number and e-mail of the command's 24/7 point of contact for COR notification and attainment reporting for the upcoming tropical cyclone season. Forward this information via voice or e-mail to the Hurricane Duty Officer or EOC when established. Contact information provided above. The reporting command POC must be available 24 hours/7 days a week during tropical season and is usually the base/command duty officer.

(2) As applicable, prepare and maintain a destructive weather plan to include:

(a) Provisions for safety of property, equipment, and personnel during periods of destructive weather and considering seasonal potential for destructive weather.

(b) Use of available radar facilities to detect and track local storms. In areas where NAVLANTMETOC command activities are not assigned, take advantage of storm warning information disseminated by the NWS, NOAA Weather Radio, or other Department of Defense (DOD) weather units.

(c) Instructions to relay tropical cyclone and destructive weather warnings to tenant commands and subordinate units.

(d) Procedures for attaining CORs at each host installation. All tenant commands and activities are required to have individual destructive weather plans.

(e) Per references (e) and (f), evacuation plans to include prearranged logistic support as required.

(3) Attain CORs for destructive weather when directed by CNRS or local host command.

(4) Establish procedures to disseminate destructive weather warnings to tenants and subordinates as necessary for local protection, as applicable.

(5) Prior to 1 May of each year, make a thorough and detailed inspection of material condition, emergency preparedness, and logistic preparations for the hurricane season (1 June through 30 November). Use enclosure (4) as a guide. Review emergency procedures periodically throughout the hurricane season.

(6) Continue to perform normal mission and functions to the maximum extent possible until precluded by impending destructive weather.

(7) Render maximum support to fleet units during destructive weather.

K. C. IRELAND
Deputy

Distribution:
CNATRAINST 5215.1R
List I (A-E, G, H)
List III
NAS Corpus Christi
NAS Kingsville
NS Ingleside
NAS JRB New Orleans
NSA New Orleans
NAS JRB Ft Worth

WEATHER WARNING DEFINITIONS

1. Weather Terminology

a. Terminology Used In CNRS Warnings

Types of Destructive Weather	Corresponding Wind Speed and Weather
TROPICAL WIND WARNING	Winds 34 – 49 knots (associated with a tropical system). Heavy rains, thunderstorms, lightning, tornadoes, storm surge, and hail may also be expected.
TROPICAL CYCLONE COR	Tropical system with winds 50 knots or greater. Heavy rains, thunderstorms, lightning, tornadoes, storm surge, and hail may also be expected.
THUNDERSTORM	Thunderstorms are forecast to impact the warning area with gusty winds with velocities less than 50 knots. Lightning and thunder can be expected; hail, if any, less than 3/4 inch in diameter.
SEVERE THUNDERSTORM	Severe thunderstorms with wind gusts 50 Knots or greater. Lightning, thunder and hail, if any, 3/4 inch or greater in diameter are forecast to impact the warning area.

Types of Destructive Weather	Corresponding Wind Speed and Weather
TORNADO	Tornadoes have been sighted or detected by RADAR in or adjacent to the warning area,or have a strong potential to develop in the warning area.
SMALL CRAFT WARNING	Winds up to 33 knots (including gusts). The lower threshold for issuing such warning is set by local area authority.
GALE WARNING	Sustained winds (non tropical) between 34 and 47 knots.
STORM WARNING	Sustained winds (non tropical) of 48 knots or greater.

b. Terminology Used By The National Weather Service

SEVERE THUNDERSTORM OR TORNADO WATCH	Conditions are conducive for tornadic activity and/or severe thunderstorms within and close to the watch area.
SEVERE THUNDERSTORM OR TORNADO WARNING	A severe thunderstorm or tornado has been confirmed by observation or indicated by weather radar. Persons close to the storm should take cover immediately. Those further away should take cover if threatening conditions approach.
TROPICAL STORM/HURRICANE WATCH	Tropical Storm/Hurricane poses a possible threat to a specified coastal area within 36 hours.

TROPICAL STORM/HURRICANE WARNING	Tropical Storm/Hurricane force winds are expected in a specified coastal area within 24 hours.

2. Warnings. Warnings of destructive weather will be issued in the following forms:

a. Tropical Cyclone Warnings: Issued by NAVLANTMETOCCEN Norfolk to the collective Hurricane Warnings Atlantic (CAD: HURRIWARNLANT) and received by all military communications centers within CNRS AOR. The NAVLANTMETOC DET Corpus Christi will issue a ***Tropical Wind Warning*** and/or recommend a ***Tropical Cyclone Condition of Readiness (COR)*** for affected sub-regional areas within CNRS AOR.

b. Local Area Warnings: Thunderstorm, tornado, gale and storm warnings, as defined in paragraph 1, are issued by tenant NAVLANTMETOC activities for their host installation during hours of operation. After normal hours, NAVLANTMETOCFAC Jacksonville or local NWS office will assume this responsibility. Small craft warnings will only be issued by local NAVLANTMETOC activities as required by local commanders. NWS warnings should always be heeded and, in some cases, may serve as the only source of weather watches and warnings.

(1) Thunderstorm/Tornado Conditions: Set by host commanders based on recommendations of NAVLANTMETOCFAC Jacksonville or the tenant NAVLANTMETOC activity in accordance with local destructive weather plans. Host commands will inform local units and local units take precautions that will permit appropriate protection of personnel and material on short notice. Commands or activities not serviced by a NAVLANTMETOC activity will set thunderstorm/tornado conditions based on information received through local news media or weather agencies.

(a) Thunderstorm/Tornado Condition 2: Destructive winds accompanying the phenomena are expected in the general area within six hours. Lightning, thunder, and hail are anticipated.

(b) Thunderstorm/Tornado Condition 1: Destructive winds of force indicated accompanying the phenomena are imminent. Lightning, thunder, and hail are anticipated. An advance warning time of no less than 30 minutes is desired to allow sufficient time for notification and precautionary action by local units. However, this is not always practical and host

commands will inform local units as soon as possible with all units taking immediate precautions to protect personnel and material.

c. Warnings and conditions of readiness will be disseminated to designated activities via telephone and/or email.

d. Host commands with a tenant NAVLANTMETOC activity receive warnings from their local activity.

e. Gale/Storm Conditions: Gale and storm conditions have the same time and preparation criteria as tropical cyclone conditions. COR for their occurrence must be included in local destructive weather plans and will be set locally as required.

SAFFIR/SIMPSON HURRICANE CATEGORY DEFINITIONS

1. Hurricane Categories: Hurricane intensity and expected damage is categorized according to the Saffir-Simpson scale. The scale ranges from categories one through five, with five being the most severe. The categories and their effects are:

a. Category One

(1) Winds 65 to 82 knots (75 to 95 miles per hour). Damage primarily to shrubbery, trees, foliage and unanchored mobile homes. No real damage to permanent building structures.

(2) Storm Surge, four to five feet above mean water level. Low-lying coastal roads inundated, minor pier damage.

b. Category Two

(1) Winds 83 to 95 knots (96 to 110 miles per hour). Considerable damage to shrubbery and tree foliage with some trees blown down. Major structural damage to exposed mobile homes. Some damage to roofing material, windows and doors. No major damage to permanent building structures.

(2) Storm Surge, six to eight feet above mean water level. Coastal roads and low-lying escape routes inland cut by rising water. Considerable pier damage and marinas flooded. Evacuation of some shoreline residences and low-lying island areas required.

c. Category Three

(1) Winds 96 to 113 knots (111 to 130 miles per hour). Damage to shrubbery and trees. Foliage off trees, large trees blown down. Some roofing material damage; some window and door damage; some structural damage to small residences and utility buildings. Mobile homes destroyed. Minor amount of curtain wall failures.

(2) Storm Surge, nine to 12 feet above mean water level. Serious flooding along coast with many smaller structures near coast destroyed. Larger structures damaged by battering of floating debris. Low-lying escape routes inland cut by rising water.

d. Category Four

(1) Winds 114 to 135 knots (131 to 155 miles per hour). Shrubs and trees down. Extensive roofing material damage; extensive window and door damage. Complete failure of roof structures on many small residences and complete destruction of mobile homes.

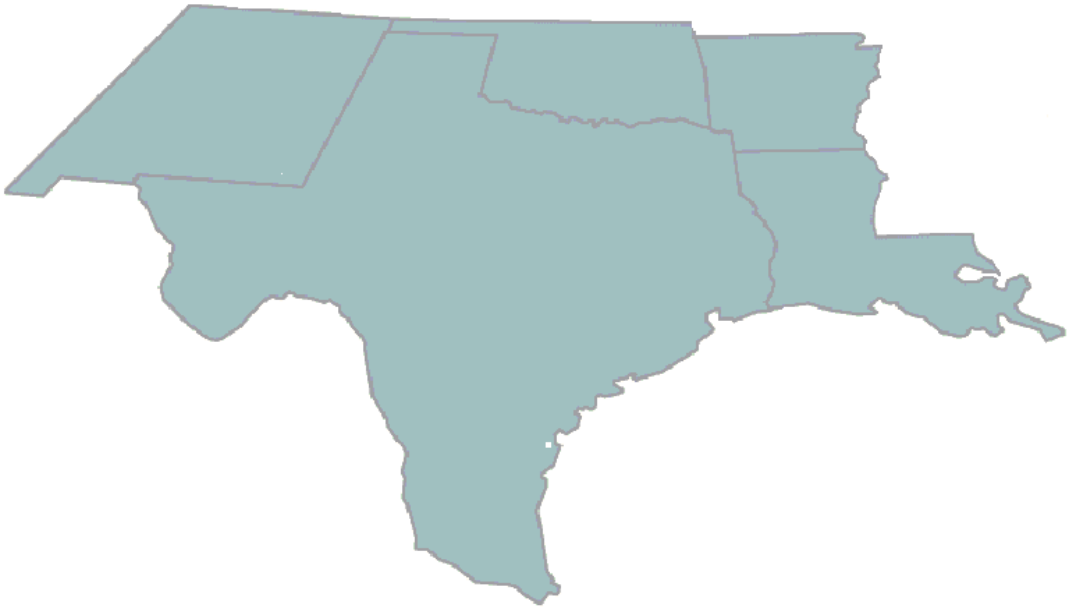
(2) Storm Surge, 13 to 18 feet above mean water level. Major damage to lower floors of structures near the shore due to flooding and battering action. Low-lying escape routes inland cut by rising water. Major erosion of beach areas.

e. Category Five

(1) Winds greater than 135 knots (155 miles per hour). Shrubs and trees down and roofing damage considerable. Very severe and extensive window and door damage. Complete failure of roof structures on many residences and industrial buildings; extensive glass failure; some complete building failures; small buildings overturned and blown over or away and complete destruction of mobile homes. Major power distribution failures causing loss of water and sewer for an extended period.

(2) Storm Surge, greater than 18 feet above mean water level. Major damage to lower floors of all structures. Low lying escape routes inland cut by rising water. Evacuation of residential areas situated on low ground within 5 to 10 miles of the shoreline may be required.

Navy Region South Map and Areas of Responsibilities



Commander Navy Region South (CNRS) has overall COR setting responsibility for LA, TX, and AR. CNRS has assigned sub-regional coordinators as follows:

(1) CO, NSA New Orleans: For Louisiana

(2) CNATRA, Corpus Christi TX: For Texas

(3) NAS JRB Fort Worth

ACTIVITY HURRICANE PREPARATION PLAN

In preparation for the hurricane season, all commands should complete the following checklist of precautionary items prior to 1 May each year.

___ Review local and installation Destructive Weather bills for currency and accuracy.

___ Make thorough periodic checks of emergency teams, emergency facilities (including command posts) and First Responder forces.

___ Provide instructions on the proper method of venting enclosed buildings and structures using windows, storm shutters and similar means.

___ Make a careful inspection of buildings and surrounding areas in order to detect and remove potential sources of danger such as: Damaged, worn, or improperly secured doors, windows or ventilation openings. Structural weaknesses resulting in worn or weather-beaten supports, i.e., wooden light poles and similar constructs. Gutters and drain pipes on buildings that are clogged, worn, or otherwise incapable of normal operation. Storm drains, sewers, holding ponds and catch basins, which have not been cleaned out and made ready for maximum capacity operation. Hazardous trees, especially those with rotted limbs or trunks.

___ Ensure that "hurricane kits" and emergency supply lockers are fully stocked with useable materials necessary to perform elementary repairs to electric power and lighting installations, plumbing, water systems, and heating equipment.

___ Locate and mark all material that could be a potential missile hazard in hurricane force winds, including garbage cans, loose lumber, pails, benches, and similar loose gear. Be prepared to move these items to safe storage or have them lashed down.

___ Locate protected high ground for stowage of rolling stock to minimize damage from flooding.

___ Because some automotive equipment must be used during storm conditions, ensure that driver's compartments and cabs are as weather tight as possible; windshield wipers are fully operational; tire chains are available for operations in mud; and towing wires and chains are prepared in advance. Maintain an adequate supply of spare parts and tires for the vehicles themselves.

___ Inspect and test all auxiliary systems such as communications, electric, light, power, and water supply. Verify that all firefighting and water pumping equipment is operational. Ensure that procedures and methods are adequate and ready for practical application under the most severe conditions.

___ Ensure that all personnel understand the procedures to be followed in the event an evacuation is ordered. They should know evacuation routes and what to take when they leave their designated refuge base, and when and where they are expected to muster and how to contact official Navy representatives and their command after the storm has passed.

___ Prepare a comprehensive recovery plan to implement after storm passage. Include detailed procedures for restoration of essential services, personnel recall, and installation clean up.

___ Validate the critical recovery of infrastructure and support services.